

Accessing and integrating BLM's Public Land Survey System (PLSS) data through the Land Survey Information System (LSIS) data streaming service

BLM and its partners are collecting and assembling a seamless multipurpose cadastre (Township/Range/Section/Aliquot) from the Public Land Survey System (PLSS) for use in GIS applications. This foundation layer is now available as a streaming data service accessible through ESRI's Geography Network and BLM's GeoCommunicator web site. The following instructions will guide you through an interactive web session where you will integrate the BLM's PLSS with reference themes from the USGS.

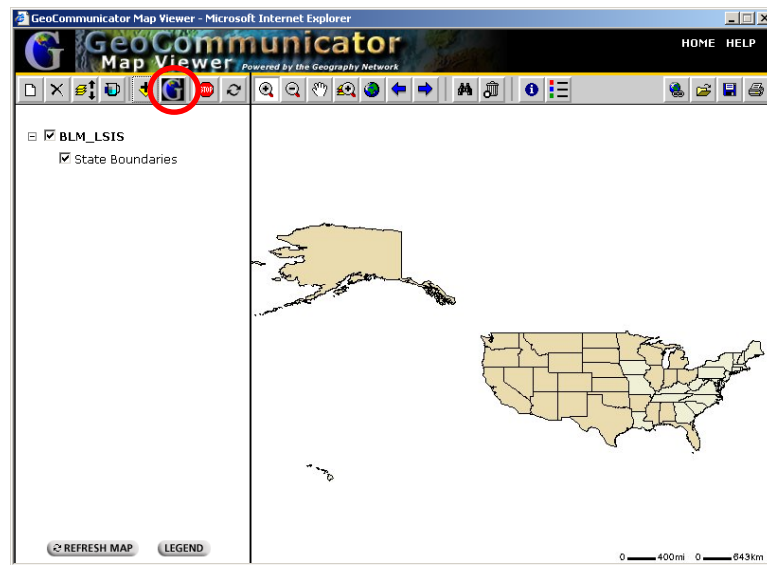
1. Connect to the GeoCommunicator website <http://www.geocommunicator.gov/> and click on the GeoCom Explorer link.



2. From the Explorer window, select "Federal" as the Content Developer Type and type "PLSS" in the Optional Keyword entry box, then click on the "START SEARCH" button. When the Search Results are returned, locate the Land Survey Information entry under Live Data and Maps and click on "Add to ArcExplorer Web".



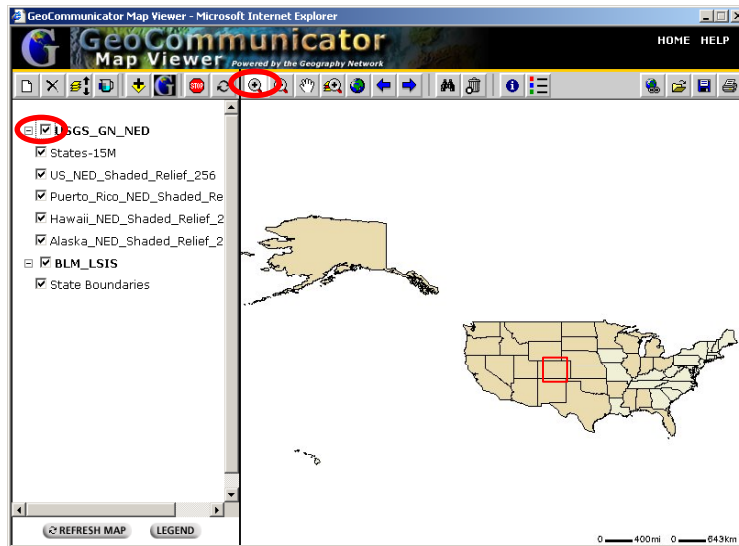
3. Once inside the Map Viewer, additional streaming layers can be added for reference. For this exercise, we will add shaded relief from the USGS data streaming service. Click on the GeoComm Explorer button to search for the USGS data service.



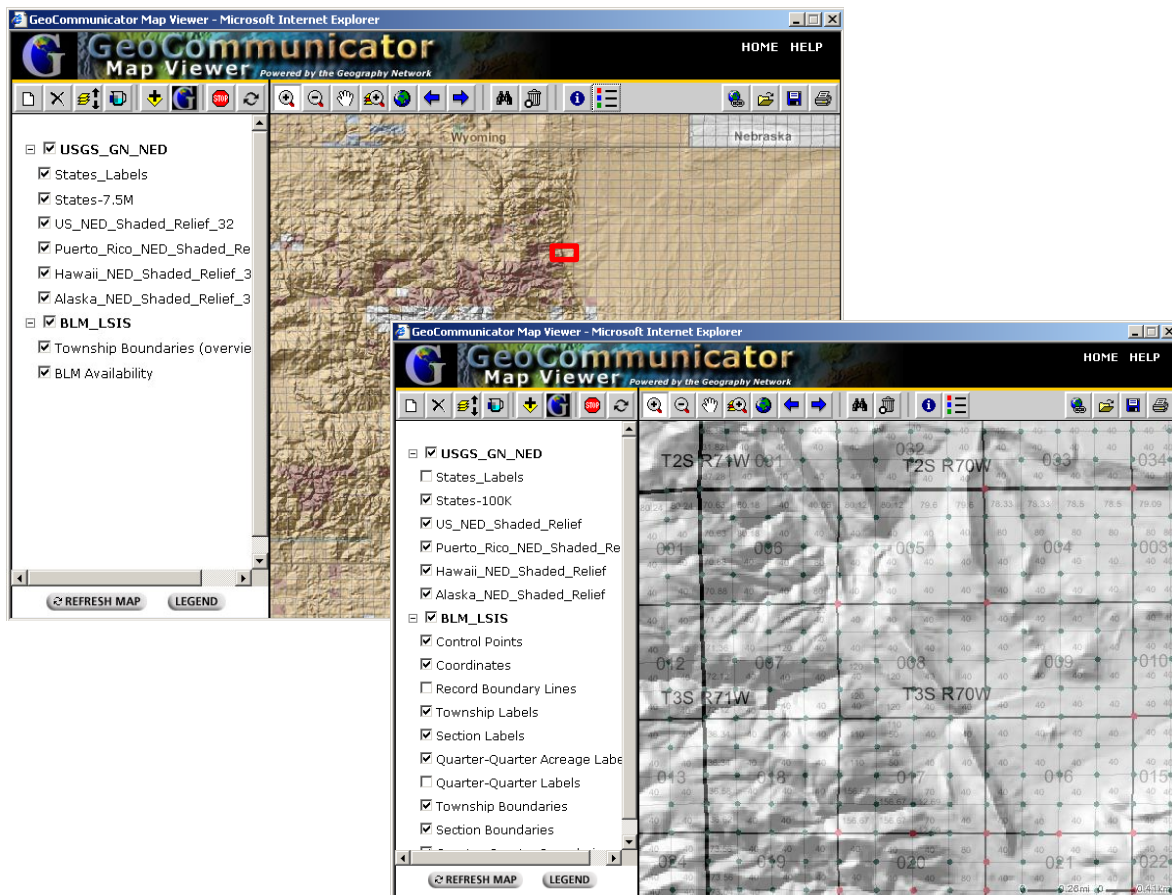
4. From the Explorer window, select “Federal” as the Content Developer Type and select “Elevation and Derived Prods” from the Choose content theme pulldown menu, then click on the “START SEARCH” button. When the Search Results are returned, locate the National Elevation Dataset – Shaded Relief entry and click on “Add to ArcExplorer Web”.



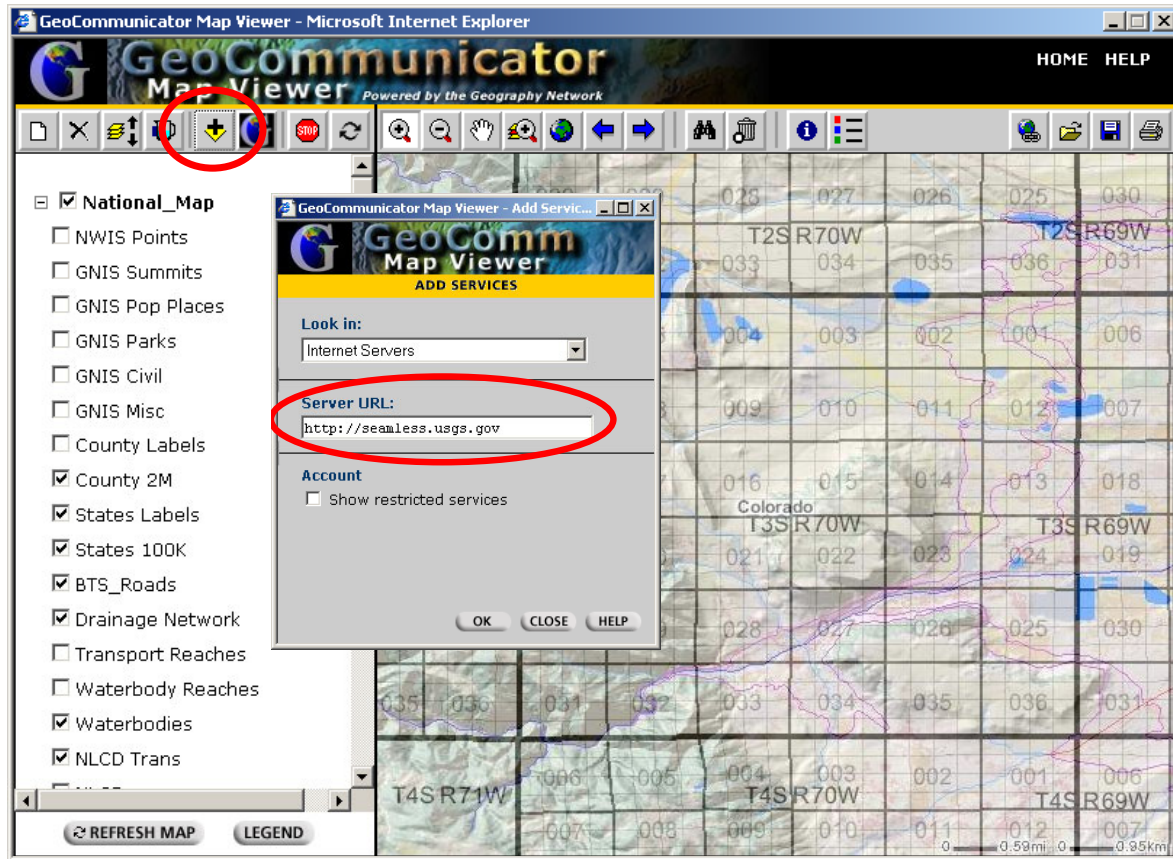
5. From the Map Viewer, ensure that the USGS data entry is visible (checkbox is checked) and use the zoom tool to drag a box around a smaller area of interest.



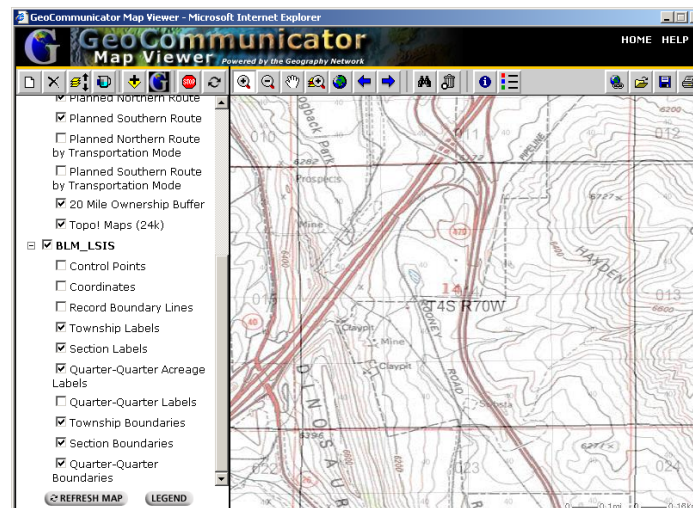
6. As you zoom into successively smaller areas, a greater level of detail will be made available. Once zoomed in beyond a certain level, some data layers may disappear or appear “pixilated”.



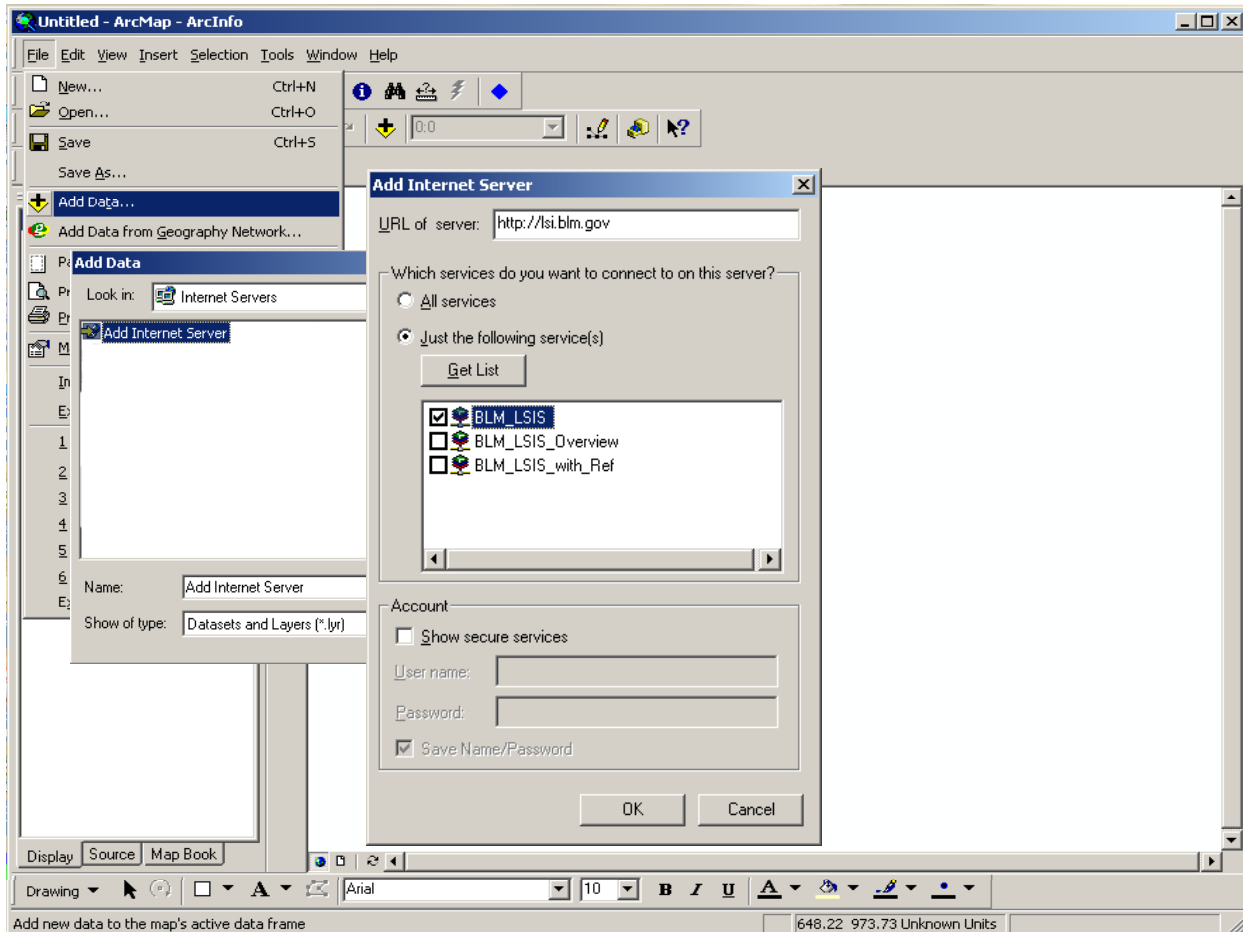
7. Any ArcIMS data service not registered through Geocommunicator can be integrated into the Map Viewer as long as you know the URL of the data source. Use the Add Services button to access the URL dialog window and type in the known map service URL.



8. The Land Survey Information System streaming service is currently being served in a Geographic (decimal degrees) projection using NAD27 datum. Additional streaming services will integrate and align as long as they are also being served using NAD27 geographic projection. A slight horizontal shift will occur when integrating geographic NAD83 streaming services.



9. The LSIS streaming service can be added to ESRI's ArcMap GIS in a similar manner. Through the "Add Data" dialog window, choose "Add Internet Server". From the Add Internet Server dialog window, type in the URL of server: <http://lsi.blm.gov> and choose BLM_L SIS from the list of services.



Any questions regarding these instructions can be directed to:

John Reitsma
GIS Specialist
Lands and Resources Project - WO330D
Bldg. 40 Denver Federal Center 80225
(303) 236-1984